

**REMARKS**

Claims 1-20 were pending in this application.

Claims 1-3 and 11-13 have been rejected.

Claims 4-10 and 14-20 have been objected to.

Claims 1, 4, 11, and 14 have been amended as shown above.

Claims 1-20 remain pending in this application.

Reconsideration and full allowance of Claims 1-20 are respectfully requested.

**I. ALLOWABLE CLAIMS**

The Applicants thank the Examiner for the indication that Claims 4-10 and 14-20 would be allowable if rewritten in independent form to incorporate the elements of their respective base claims and any intervening claims. The Applicants have amended Claims 4 and 14 as shown above. The Applicants respectfully assert that Claims 4 and 14 (and their dependent claims) are in condition for allowance. The Applicants respectfully request full allowance of Claims 4-10 and 14-20.

**II. OBJECTIONS TO SPECIFICATION**

The Office Action objects to various informalities in the specification. The Applicants have amended the specification to correct the noted informalities. The Applicants respectfully request withdrawal of the objections to the specification.

### III. OBJECTIONS TO DRAWINGS

The Office Action objects to the drawings, asserting that Figure 6 should be labeled as “Prior Art.” The Applicants have amended Figure 6 to include a “Prior Art” label.

Also, the Office Action asserts that the drawings fail to illustrate a “second impedance circuit” as recited in Claim 4. The Applicants respectfully note that N-channel transistor 714 in Figure 7 represents a non-limiting example of the “first impedance circuit” as recited in Claim 4. The Applicants also respectfully note that N-channel transistor 715 in Figure 7 represents a non-limiting example of the “second impedance circuit” as recited in Claim 4. Based on this, the Applicants respectfully assert that Figure 7 illustrates the “first impedance circuit” and the “second impedance circuit” recited in Claim 4.

In addition, the Office Action states that the Applicants must “correct all drawings so the drain and source terminals [of transistors] are not switched or provide some arrow or other indication thus allowing one skilled in the art to easily identify the drain and source terminals.” (*Office Action, Page 4, Third paragraph*). The Applicants respectfully note that the Applicants’ specification and claims clearly recite how the source and drain terminals of the various transistors are connected. (*See, e.g., paragraphs [0050]*). Based on this, one skilled in the art may easily identify the drain and source terminals of the various transistors.

Accordingly, the Applicants respectfully request withdrawal of the objections to the drawings.

### IV. REJECTION UNDER 35 U.S.C. § 103

The Office Action rejects Claims 1-3 under 35 U.S.C. § 103(a) as being unpatentable

over the admitted prior art (“*APA*”) in view of U.S. Patent No. 6,320,795 to Balamurugan et al. (“*Balamurugan*”). The Office Action rejects Claims 11-13 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,605,935 to Nilsson (“*Nilsson*”) in view of *APA* and *Balamurugan*. The Applicants respectfully traverse these rejections.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. (*MPEP* § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992)). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. (*MPEP* § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984)). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. (*MPEP* § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993)). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. (*In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985)).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. (*In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993)). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of

ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. (*MPEP* § 2142).

Claim 1 recites that a biasing circuit is capable of “pulling [a] second internal node [between second and third transmission gate switches] to ground” and “generating a negative  $V_{gs}$  bias on [a] first N-channel transistor [in a first transmission gate switch] when [a] test signal is disabled.” The Office Action cites *Balamurugan* as disclosing, teaching, or suggesting these elements of Claim 1.

The biasing element in *Balamurugan* (bias device 72) is designed only to apply a voltage to the source terminal of a single transistor (transistor 62). (*Col. 6, Lines 5-27*). The bias device 72 of *Balamurugan* is not capable of both “pulling [a] second internal node [between the second and third transmission gate switches] to ground” and “generating a negative  $V_{gs}$  bias on [a] first N-channel transistor [in the first transmission gate switch] when [a] test signal is disabled” as recited in Claim 1.

Because of this, the proposed *APA-Balamurugan* combination fails to disclose, teach, or suggest the “biasing circuit” as recited in Claim 1. As a result, the proposed *APA-Balamurugan* combination fails to disclose, teach, or suggest the Applicants' invention as recited in Claim 1 (and its dependent claims).

Claim 11 is patentable over the proposed *Nilsson-APA-Balamurugan* combination for similar reasons. The Office Action cites *Nilsson* as disclosing a phase-locked loop circuit. The

Office Action does not rely on *Nilsson* as disclosing, teaching, or suggesting any other elements in Claim 11. Because of this, the proposed *Nilsson-APA-Balamurugan* fails to disclose, teach, or suggest the “biasing circuit” as recited in Claim 11. As a result, the proposed *Nilsson-APA-Balamurugan* fails to disclose, teach, or suggest the Applicants’ invention as recited in Claim 11 (and its dependent claims).

For these reasons, the Office Action does not establish a *prima facie* case of obviousness against Claims 1-3 and 11-13. Accordingly, the Applicants respectfully request withdrawal of the § 103 rejections and full allowance of Claims 1-3 and 11-13.

V. **CONCLUSION**

As a result of the foregoing, the Applicants assert that all claims in this application are in condition for allowance and respectfully request full allowance of such claims.

SUMMARY

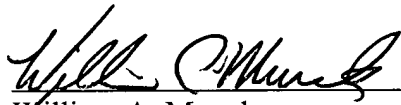
If any issues arise, or if the Examiner has any suggestions for expediting allowance of this application, the Applicants respectfully invite the Examiner to contact the undersigned at the telephone number indicated below or at *wmunck@davismunck.com*.

The Applicants have included the appropriate fee to cover the cost of this AMENDMENT AND RESPONSE. The Commissioner is hereby authorized to charge any additional fees connected with this communication (including any extension of time fees) or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

DAVIS MUNCK, P.C.

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**IN THE DRAWINGS**

Please amend the drawings as shown in red ink on the attached sheet. The Applicants propose to amend Figure 6 to include a “Prior Art” label.